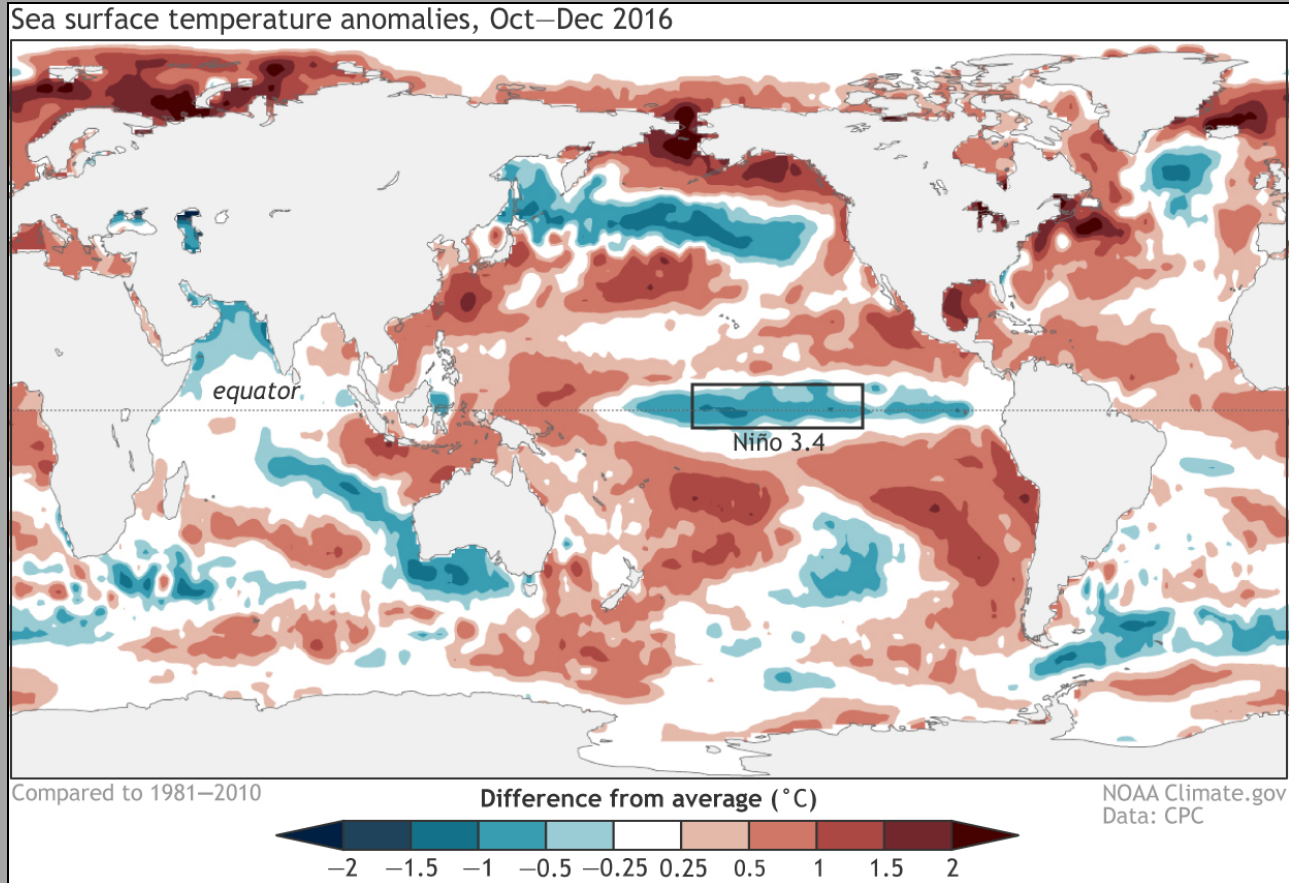


La Nina Status and Climate and Drought Outlooks



Summary

ENSO Alert System Status: La Niña Advisory

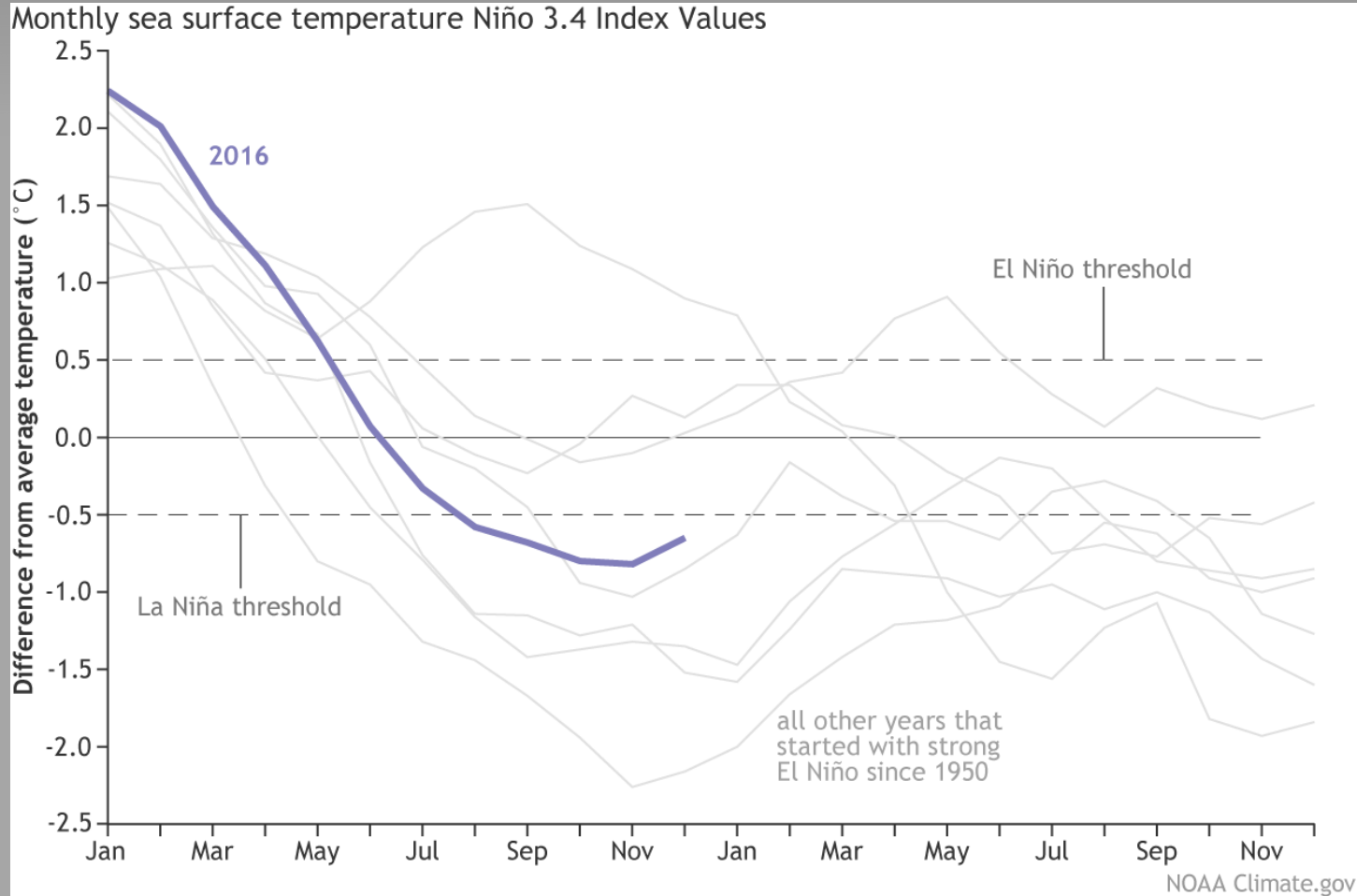
La Niña conditions are present.*

Equatorial sea surface temperatures (SSTs) are near-to-below average in the central and eastern Pacific Ocean.

A transition to ENSO-neutral is expected to occur by February 2017, with ENSO-neutral then continuing through the first half of 2017. *

* Note: These statements are updated once a month (2nd Thursday of each month) in association with the ENSO Diagnostics Discussion, which can be found by clicking [here](#).

A Quick Look Back

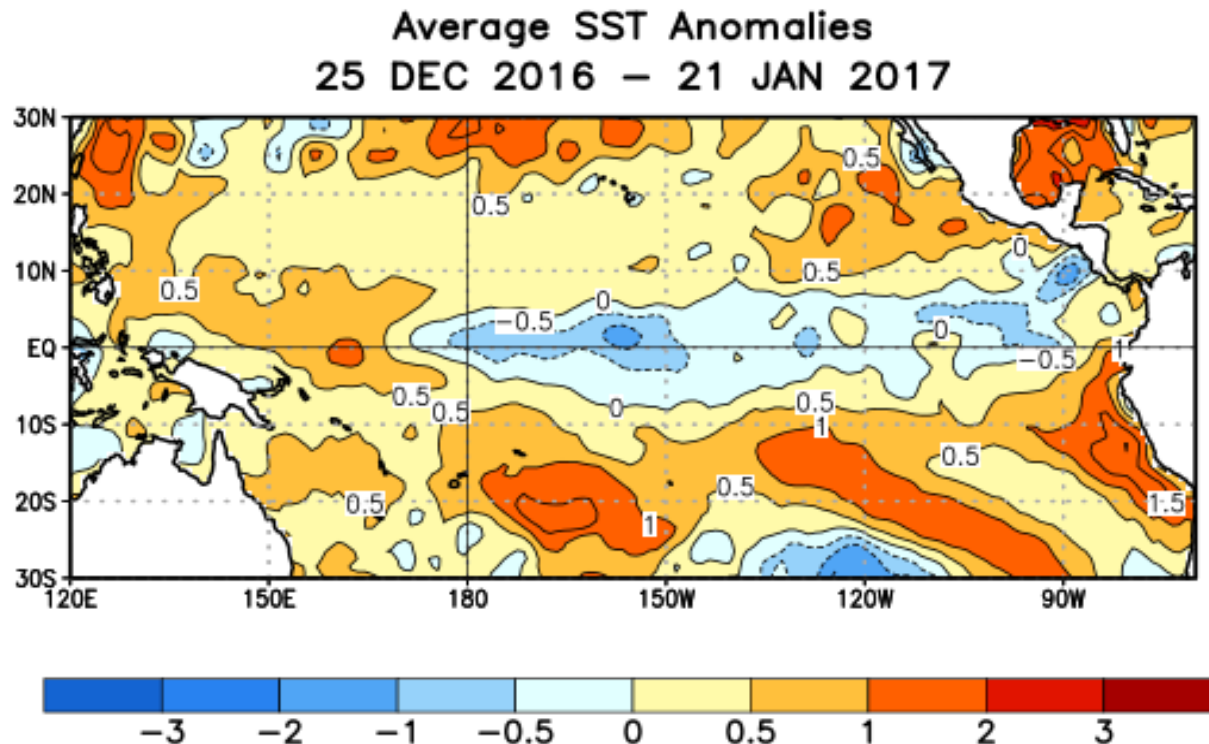


Monthly SSTs in the Niño 3.4 region of the tropical Pacific compared to the long-term average for all years starting of from moderate-to-strong El Niño since 1950

NOAA's ENSO Blog:
[**Climate.gov**](https://climate.gov/blog/)

SST Departures ($^{\circ}\text{C}$) in the Tropical Pacific During the Last Four Weeks

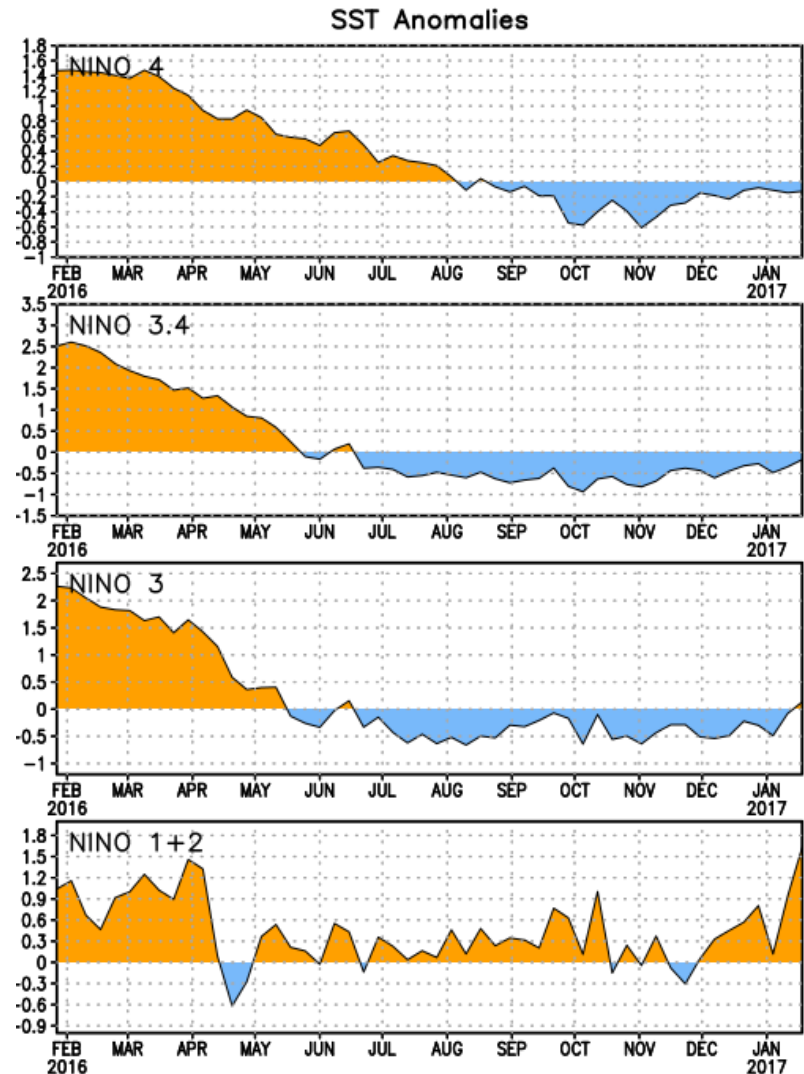
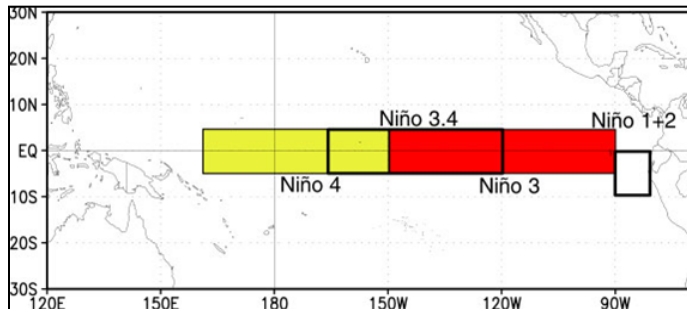
During the last four weeks, equatorial SSTs were near-to-below average across the central and east-central Pacific Ocean, and above-average near South America.



Niño Region SST Departures (°C) Recent Evolution

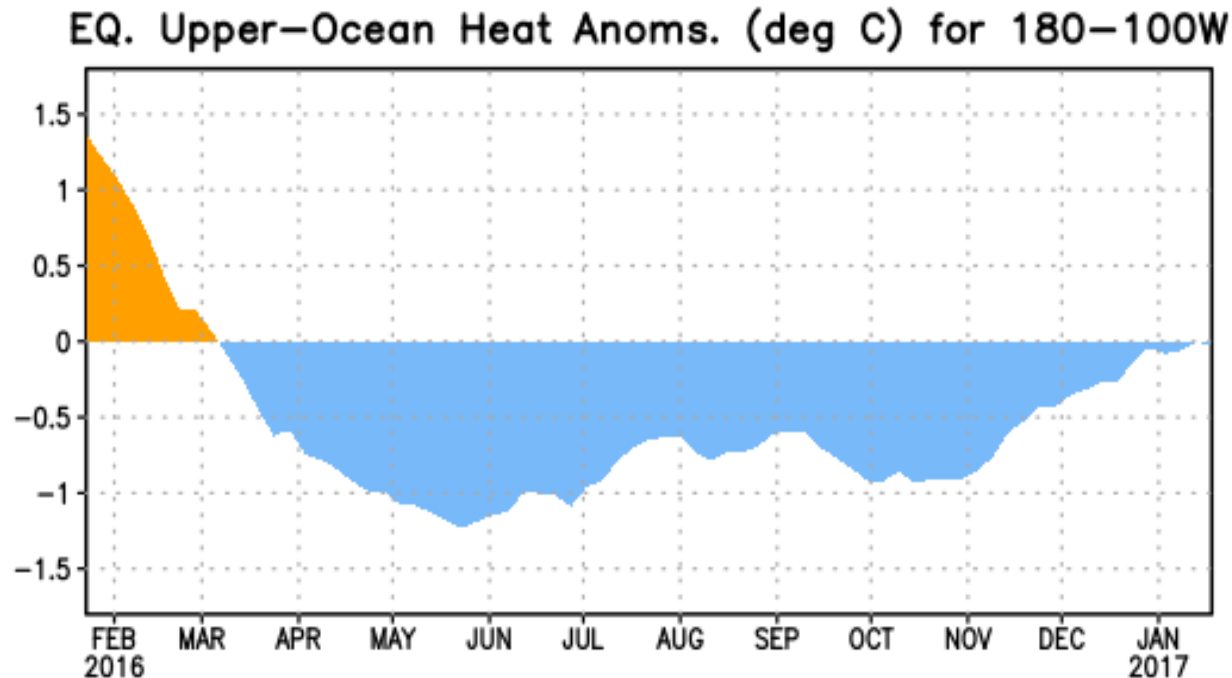
The latest weekly SST departures are:

Niño 4	-0.1°C
Niño 3.4	-0.2°C
Niño 3	0.1°C
Niño 1+2	1.6°C



Central and Eastern Pacific Upper-Ocean (0-300 m) Weekly Average Temperature Anomalies

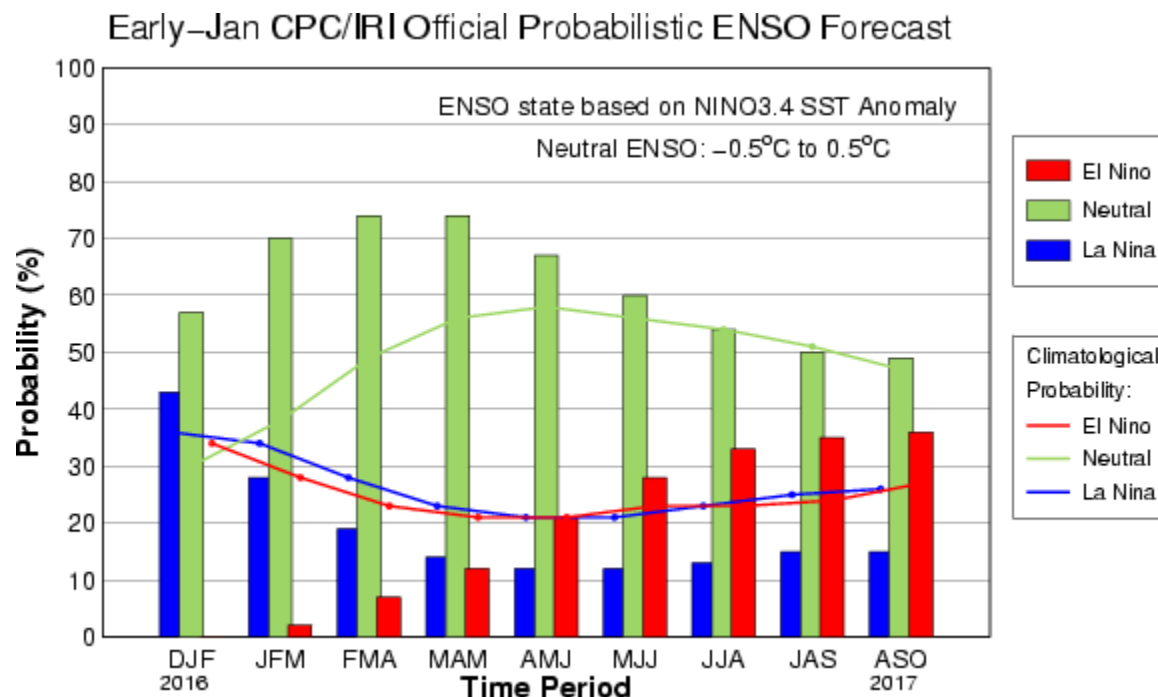
Negative subsurface temperature anomalies have been present since March 2016. The negative anomalies began to weaken in early November 2016, and returned to near-zero at the start of the new year.



CPC/IRI Probabilistic ENSO Outlook

Updated: 12 January 2017

ENSO-neutral is favored through mid-2017, with smaller chances of El Niño (~35%) and La Niña (~15%) by August-September-October (ASO) 2017.



IRI/CPC Pacific Niño

3.4 SST Model Outlook

Most models indicate ENSO-neutral will continue through early Northern Hemisphere autumn 2017.

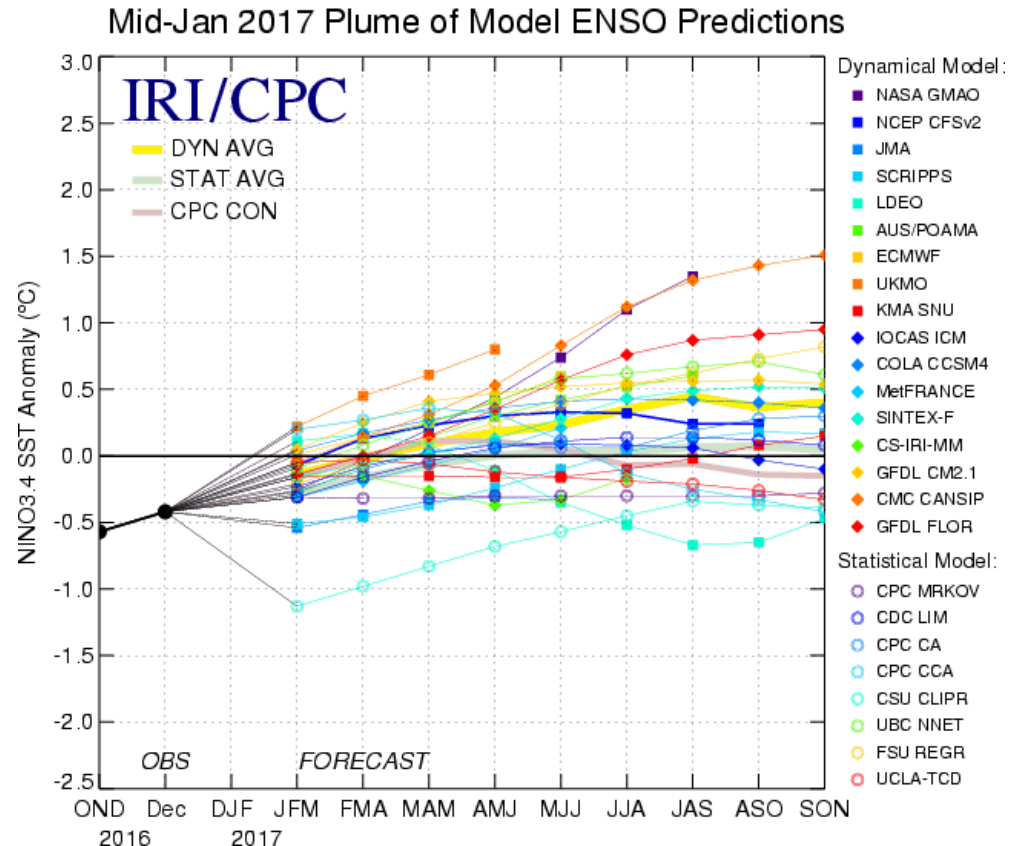


Figure provided by the International Research Institute (IRI) for Climate and Society (updated 18 January 2017).

Historical El Niño and La Niña Episodes Based on the ONI computed using ERSST.v4

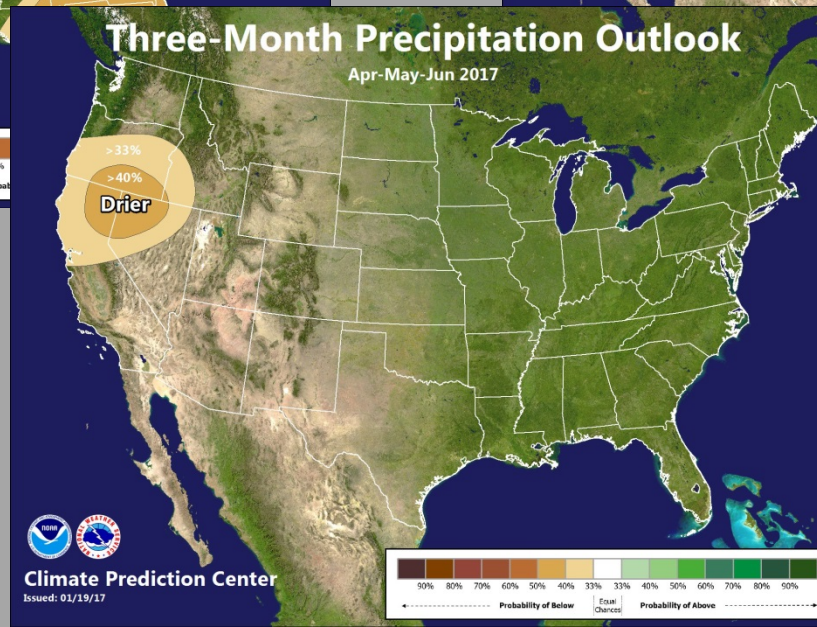
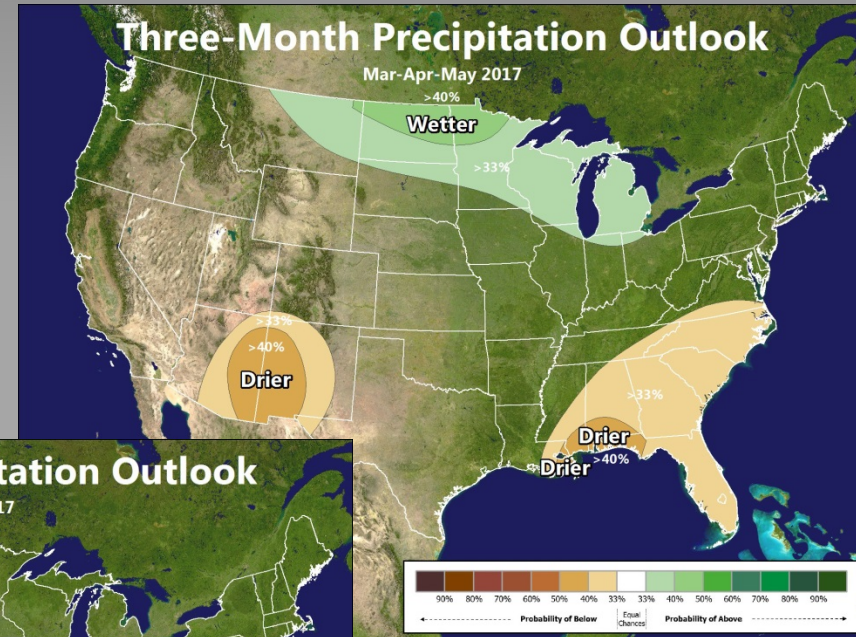
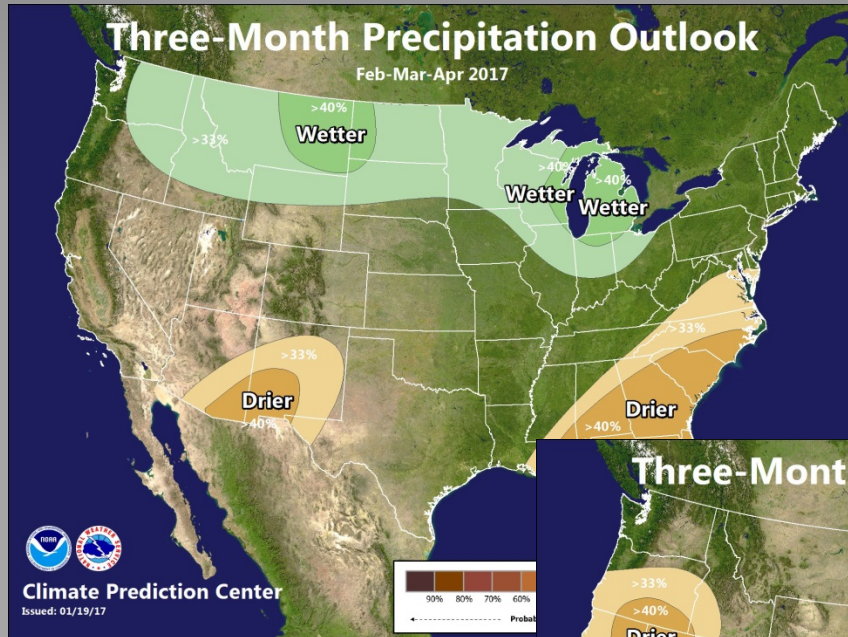
Recent Pacific warm (red) and cold (blue) periods based on a threshold of ± 0.5 °C for the Oceanic Nino Index (ONI) [3 month running mean of ERSST.v4 SST anomalies in the Nino 3.4 region (5N-5S, 120-170W)]. For historical purposes, periods of below and above normal SSTs are colored in blue and red when the threshold is met for a minimum of 5 consecutive over-lapping seasons.

The ONI is one measure of the El Niño-Southern Oscillation, and other indices can confirm whether features consistent with a coupled ocean-atmosphere phenomenon accompanied these periods. The complete table going back to DJF 1950 can be found [here](#).

Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2004	0.3	0.3	0.2	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.6	0.7
2005	0.7	0.6	0.5	0.5	0.3	0.2	0.0	-0.1	0.0	-0.2	-0.5	-0.7
2006	-0.7	-0.6	-0.4	-0.2	0.0	0.0	0.1	0.3	0.5	0.7	0.9	0.9
2007	0.7	0.4	0.1	-0.1	-0.2	-0.3	-0.4	-0.6	-0.9	-1.1	-1.3	-1.3
2008	-1.4	-1.3	-1.1	-0.9	-0.7	-0.5	-0.4	-0.3	-0.3	-0.4	-0.6	-0.7
2009	-0.7	-0.6	-0.4	-0.1	0.2	0.4	0.5	0.5	0.6	0.9	1.1	1.3
2010	1.3	1.2	0.9	0.5	0.0	-0.4	-0.9	-1.2	-1.4	-1.5	-1.4	-1.4
2011	-1.3	-1.0	-0.7	-0.5	-0.4	-0.3	-0.3	-0.6	-0.8	-0.9	-1.0	-0.9
2012	-0.7	-0.5	-0.4	-0.4	-0.3	-0.1	0.1	0.3	0.3	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3
2014	-0.5	-0.5	-0.4	-0.2	-0.1	0.0	-0.1	0.0	0.1	0.4	0.5	0.6
2015	0.6	0.5	0.6	0.7	0.8	1.0	1.2	1.4	1.7	2.0	2.2	2.3
2016	2.2	2.0	1.6	1.1	0.6	0.1	-0.3	-0.6	-0.8	-0.8	-0.8	

U. S. Seasonal Outlooks

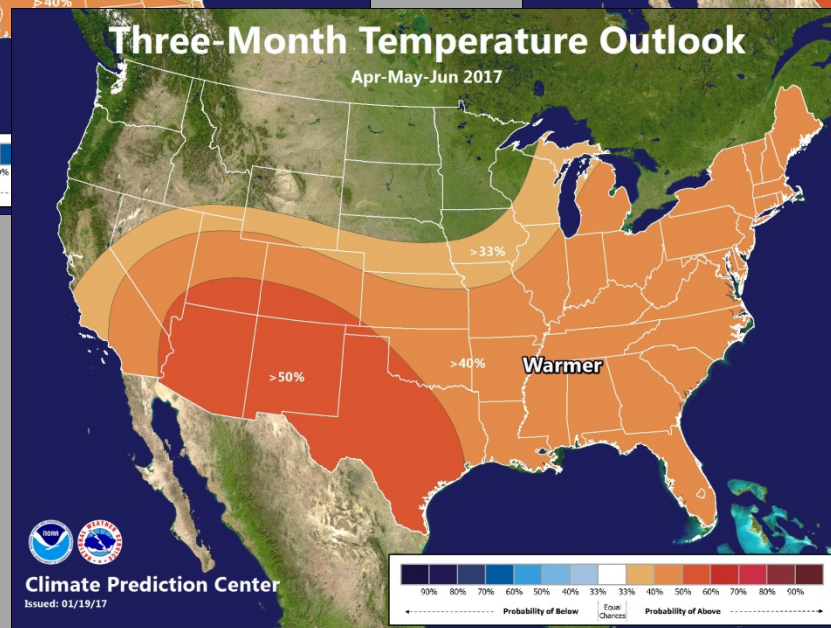
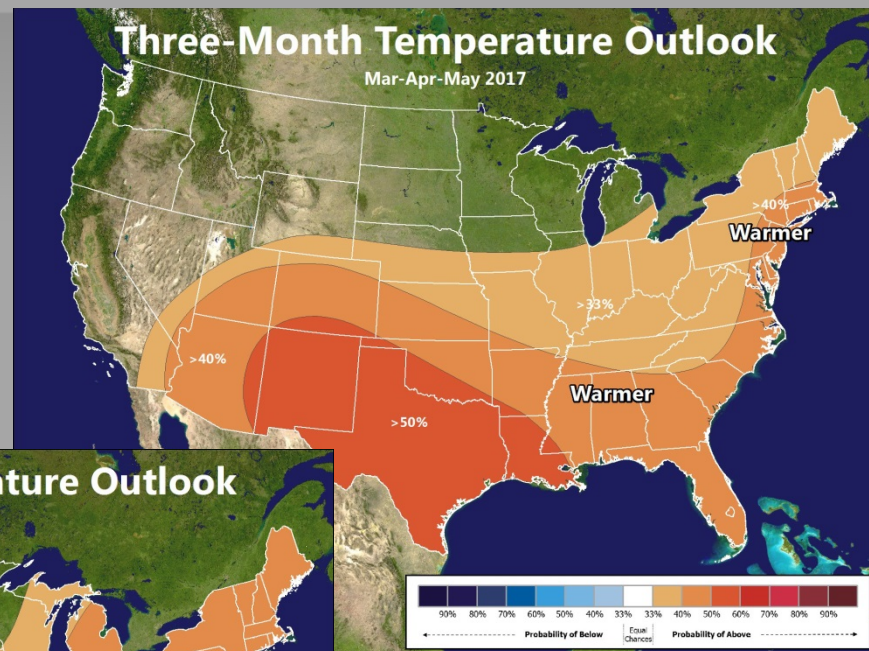
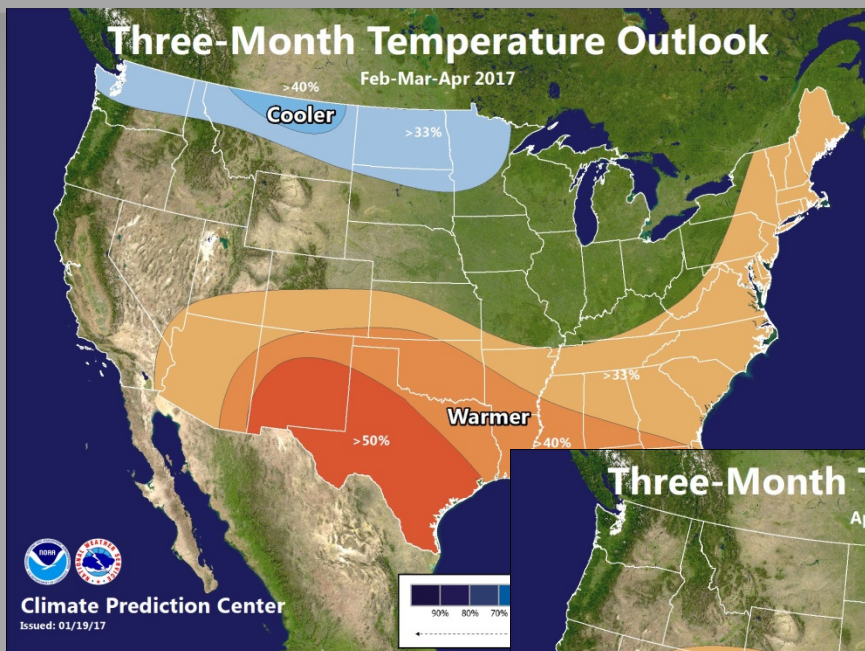
Precipitation



The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.

U. S. Seasonal Outlooks

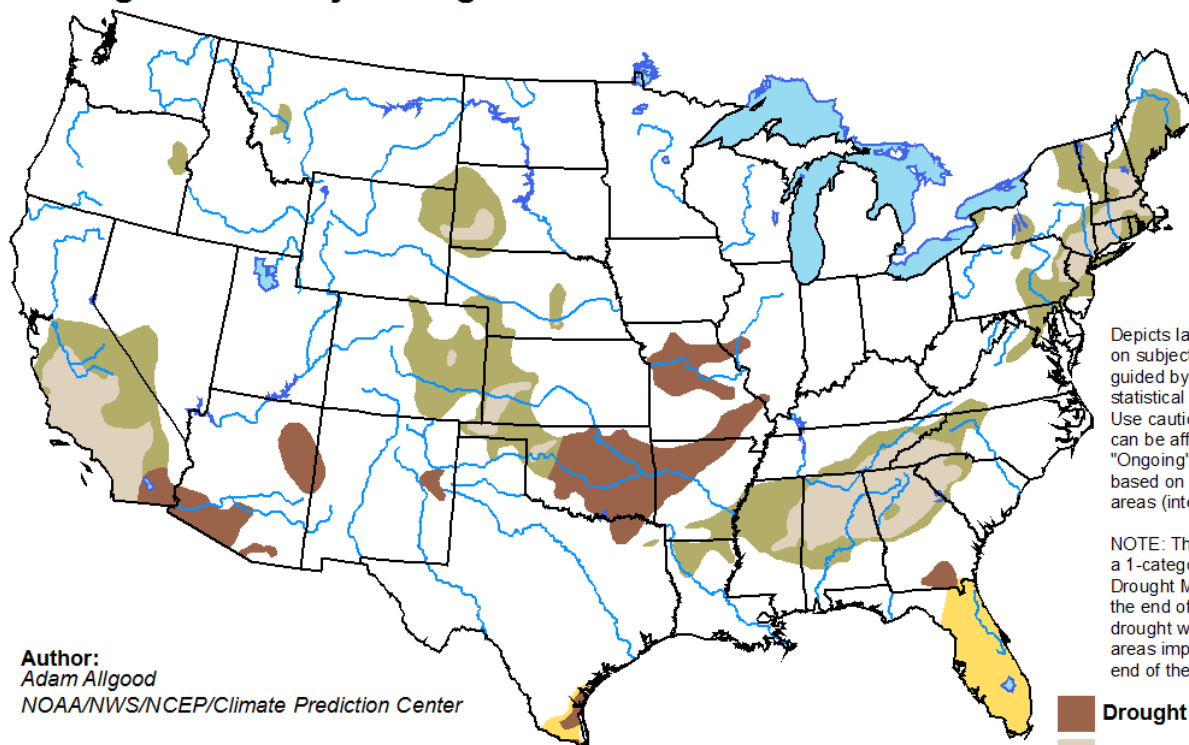
Temperature



U. S. Seasonal Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period





Valid for January 19 - April 30, 2017
Released January 19, 2017

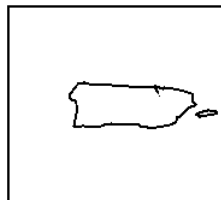
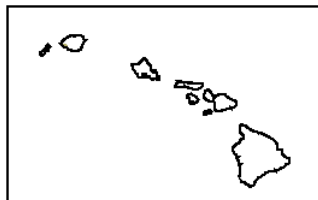
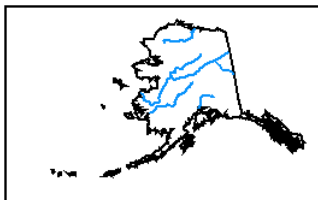


Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>

Summary

ENSO Alert System Status: La Niña Advisory

La Niña conditions are present.*

Equatorial sea surface temperatures (SSTs) are near-to-below average in the central and eastern Pacific Ocean.

A transition to ENSO-neutral is expected to occur by February 2017, with ENSO-neutral then continuing through the first half of 2017. *

* Note: These statements are updated once a month (2nd Thursday of each month) in association with the ENSO Diagnostics Discussion, which can be found by clicking [here](#).

NOAA Operational Definitions for El Niño and La Niña

El Niño: characterized by a positive ONI greater than or equal to $+0.5^{\circ}\text{C}$.

La Niña: characterized by a negative ONI less than or equal to -0.5°C .

By historical standards, to be classified as a full-fledged El Niño or La Niña episode, these thresholds must be exceeded for a period of at least 5 consecutive overlapping 3-month seasons.

CPC considers El Niño or La Niña conditions to occur when the monthly Niño3.4 OISST departures meet or exceed $\pm 0.5^{\circ}\text{C}$ along with consistent atmospheric features. These anomalies must also be forecasted to persist for 3 consecutive months.